

## **ABSTRACT OF THE DISCLOSURE**

An antenna assembly is operative for receiving interrogating radiation at a variable frequency tag and generating a corresponding received signal, and for receiving a signature signal and radiating corresponding response radiation. A logic unit is operative for receiving the received signal and outputting the signature signal in response, the signature signal including a signature code for use in identifying the tag. A voltage controlled oscillator is operative for controlling a rate at which the signature code is output; and a power supply is operative for providing an electrical potential difference for energizing the tag. The voltage controlled oscillator is operable to output the signature code at a rate which is governed by the magnitude of the received signal.